

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of treatment for treating, preventing, inhibiting or reducing extracellular matrix build-up in a body tissue or a bodily fluid transport vessel, in a subject, comprising administering to a subject ~~in need of such treatment~~ an effective amount of a composition comprising a peptide agent comprising ~~amino acid sequence LKKTET, a conservative variant thereof a polypeptide comprising amino acid sequence LKKTET or a conservative variant thereof, KLKKTET, LKKTETQ, Thymosin beta 4 (Tβ4), oxidized Tβ4, N-terminal variants of Tβ4, C-terminal variants of Tβ4, Tβ9, Tβ10, Tβ11, Tβ12, Tβ13, Tβ14, Tβ15, gelsolin, vitamin D binding protein (DBP), profilin, cofilin, depactin, Dnase1, vilin, fragmin, severin, capping protein, β-actinin or acutennin, or a stimulating agent that stimulates production of said polypeptide an LKKTET peptide, or a conservative variant thereof, in said tissue, so as to inhibit said extracellular matrix build-up in a body tissue or a bodily fluid transport vessel.~~
~~KLKKTET, a conservative variant thereof a polypeptide comprising amino acid sequence LKKTET or a conservative variant thereof, KLKKTET, LKKTETQ, Thymosin beta 4 (Tβ4), oxidized Tβ4, N-terminal variants of Tβ4, C-terminal variants of Tβ4, Tβ9, Tβ10, Tβ11, Tβ12, Tβ13, Tβ14, Tβ15, gelsolin, vitamin D binding protein (DBP), profilin, cofilin, depactin, Dnase1, vilin, fragmin, severin, capping protein, β-actinin or acutennin, or a stimulating agent that stimulates production of said polypeptide an LKKTET peptide, or a conservative variant thereof, in said tissue, so as to inhibit said extracellular matrix build-up in a body tissue or a bodily fluid transport vessel.~~
2. (Currently Amended) The method of claim 1 wherein said peptide agent comprises thymosin beta 4 (Tβ4), amino acid sequence KLKKTET, amino acid sequence LKKTETQ, an N-terminal variant of Tβ4, a C-terminal variant of Tβ4, an isoform of Tβ4, or oxidized Tβ4 or Tβ4 sulfoxide.
3. (Original) The method of claim 1 wherein said peptide agent is administered to said subject at a dosage within a range of about 1-10 mg/kg body weight of said subject.
4. (Original) The method of claim 1 wherein said agent is administered by direct administration to said tissue, or by intravenous, intraperitoneal, intramuscular, subcutaneous, inhalation, transdermal or oral administration, to said subject.
5. (Original) The method of claim 1 wherein said composition is administered systemically.

6. (Original) The method of claim 1 wherein said composition is administered directly.
7. (Original) The method of claim 1 wherein said composition is comprised of a matrix, adhesive, solution, gel, creme, paste, lotion, spray, suspension, dispersion, salve, hydrogel or ointment formulation.
8. (Original) The method of claim 1 wherein said peptide agent is a recombinant or synthetic peptide.
9. (Original) The method of claim 1 wherein said agent is an antibody.
10. (Original) The method of claim 1 wherein said peptide agent or said stimulating agent is administered in conjunction with utilization in said subject of at least one of an arterial stent, venous stent, cardiac catheterization, corroded stent, aortic stent, pulmonary stent, angioplasty, bypass surgery or neurosurgery.
11. (Original) The method of claim 1 wherein said matrix build-up comprises plaque present in at least one of a coronary vessel, heart valve or heart septa of said subject.
12. (Original) The method of claim 1 wherein said peptide agent or said stimulating agent is linked to a physiologically acceptable adhesive.
13. (Original) The method claim 1 wherein said peptide agent or stimulating agent is administered to said subject so as to treat, prevent, inhibit or reduce stenosis or restenosis in said subject.
14. (Original) The method of claim 13 wherein said peptide agent or said stimulating agent is administered at least one of prior to, during or following angioplasty in said subject.
- 15-17. (Canceled)
18. (Original) The method of claim 1 wherein said peptide agent or said stimulating agent is administered in combination with at least one plaque-reducing agent or cholesterol-reducing agent.

19. (New) A mechanical medical device for utilization in a body of a subject, said device being linked to a peptide agent comprising a polypeptide comprising amino acid sequence LKKTET or a conservative variant thereof, KLKKTET, LKKTETQ, Thymosin β 4 (T β 4), oxidized T β 4, N-terminal variants of T β 4, C-terminal variants of T β 4, T β 9, T β 10, T β 11, T β 12, T β 13, T β 14, T β 15, gelsolin, vitamin D binding protein (DBP), profilin, cofilin, depactin, Dnase1, vilin, fragmin, severin, capping protein, β -actinin or acumentin.
20. (New) The device of claim 19, comprising an arterial stent, a venus stent, a carotid stent, an aortic stent or a pulmonary stent.
21. (New) The device of claim 19 wherein said peptide agent is covalently linked to said device, said peptide agent is present in a matrix linked to said device, said peptide agent is coupled by an adhesive to said device, or said peptide agent is present in a gel linked to said device.
22. (New) The device of claim 19 wherein said peptide agent is T β 4.
23. (New) A method of medical treatment comprising providing the medical device of claim 19 in a body of a subject, said medical device being linked to said peptide agent.
24. (New) The method of claim 23 wherein said device is an arterial stent, a venus stent, a carotid stent, an aortic stent or a pulmonary stent.
25. (New) The method of claim 23 wherein said peptide agent is T β 4.
26. (New) A method of medical treatment comprising introducing a mechanical medical device into a body of a subject, and administering to the subject a peptide agent comprising a polypeptide comprising amino acid sequence LKKTET or a conservative variant thereof, KLKKTET, LKKTETQ, Thymosin β 4 (T β 4), oxidized T β 4, N-terminal variants of T β 4, C-terminal variants of T β 4, T β 9, T β 10, T β 11, T β 12, T β 13, T β 14, T β 15, gelsolin, vitamin D binding protein (DBP), profilin, cofilin, depactin, Dnase1, vilin, fragmin, severin, capping protein, β -actinin or acumentin, wherein said administering is at least one of before, during or after introducing said medical device into said subject.

27. (New) The method of claim 26 wherein said medial device is utilized in catheterization.
28. (New) The method of claim 26 wherein said polypeptide is thymosin beta 4.